

10/808,356  
DOCKET NO. C32-165325M/TBS

2

**AMENDMENTS TO THE CLAIMS:**

Claim 1. (Currently amended) A fan motor comprising:

a single-phase stepping motor including a stator excited by applying an electric current to a coil to function as a single-phase magnetic pole, and a rotor which has a permanent magnet magnetized to a single phase and rotates as the magnetic pole of the stator changes;

an impeller which is rotated by a rotating shaft of the rotor; and

a drive circuit for controlling an application of a current to the coil; and ~~coil;~~

a coupling mechanism which couples the impeller to the rotating shaft relatively and rotatably, wherein the coupling mechanism couples the impeller slidably to the rotating shaft of the rotor, causes the rotating shaft to race with respect to the impeller at a time of starting the motor, and causes the impeller to rotate by following a rotation of the rotating shaft by friction during a steady operation.

wherein the drive circuit applies pulse voltage to the coil and the coil constant is set so that a mean value of the current applied to the coil is 10 mA or smaller.

2. (Original) The fan motor according to claim 1, wherein the drive circuit includes CMOS transistors.
3. (Previously Presented) The fan motor according to claim 1, wherein the drive circuit comprises a timepiece IC.
4. (Original) A fan motor according to claim 1, wherein a pulse frequency which is output from the drive circuit at a time of starting is set lower than the pulse frequency during a steady operation.
5. (Canceled)
6. (Currently Amended) ~~The fan motor according to claim 1, further~~ A fan motor comprising:  
a single-phase stepping motor including a stator excited by applying an electric current to a coil to function as a single-phase magnetic pole, and a rotor which has a permanent magnet magnetized to a single phase and rotates as the magnetic pole of the stator

10/808,356  
DOCKET NO. C32-165325M/TBS

3

changes:

an impeller which is rotated by a rotating shaft of the rotor;

a drive circuit for controlling an application of a current to the coil; and

a coupling mechanism which couples the impeller to the rotating shaft relatively and rotatably, wherein the coupling mechanism couples the impeller slidably to the rotating shaft of the rotor, includes a permanent magnet for attracting the impeller so as to contact the impeller against the rotating shaft of the rotor with a predetermined holding-down force, causes the rotating shaft to race with respect to the impeller at a time of starting the motor, and causes the impeller to rotate by following a rotation of the rotating shaft during a steady operation,

wherein the drive circuit applies pulse voltage to the coil and the coil constant is set so that a mean value of the current applied to the coil is 10 mA or smaller.

7. (Previously Presented) The fan motor according to claim 1, wherein the stator comprises a pair of stator yokes that include thin magnetic boards.

8. (Previously Presented). The fan motor according to claim 7, wherein the pair of stator yokes comprise magnetically symmetrical L-shaped material.

9. (Currently Amended) The fan motor according to claim 5, 1, wherein a front end portion of the rotating shaft has a spherical shape and is inserted into the impeller.

10. (Previously Presented) The fan motor according to claim 6, wherein the permanent magnet is fixed coaxially with the rotating shaft to an underside of the impeller.

11. (Previously Presented) The fan motor according to claim 2, wherein the drive circuit comprises a controller that sends drive signals to the CMOS transistors and applies a driving voltage having an alternating pulse waveform to the coil.

12. (Previously Presented) The fan motor according to claim 1, wherein the drive circuit comprises a controller that drives the single-phase stepping motor at a constant rotation rate.

13. (Previously Presented) The fan motor according to claim 1, further comprising a plastic

10/808,356

4

DOCKET NO. C32-165325M/TBS

friction member that couples the impeller and the rotating shaft.

14. (Previously Presented) The fan motor according to claim 13, wherein a frictional force between the rotating shaft and the impeller is adjustable by altering a contact portion of the friction member.